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NURSERY PRODUCTS, LLC: ROW APPLICATION ENVIRONMENTALASSESSMENT

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SECTION 1.0

1 INTRODUCTION

1.1 INTRODUCTION

This Environmental Assessment (EA) has been prepared by the Bureau of Land Management (BLM) to address the environmental effects of the upgrade and use of a route across BLM-managed public land in San Bernardino County, California (County) as proposed in the Right of Way (ROW) application CACA-50790 submitted by Nursery Products, LLC on April 1, 2009. The route would be used to access private land which is the site of a County-approved 80-acre composting facility, the Hawes Composting Facility (HCF) to recycle biosolids and green material into agricultural-grade compost. This facility is to be built approximately eight miles west of the unincorporated community of Hinkley (Assessor's Parcel Number 0492-021-24), as shown in **Figure 1-1** on the following page. The access route is located just northwest of the city of Barstow, California, and runs west-northwest off of Helendale Road, south of State Route (SR) 58.

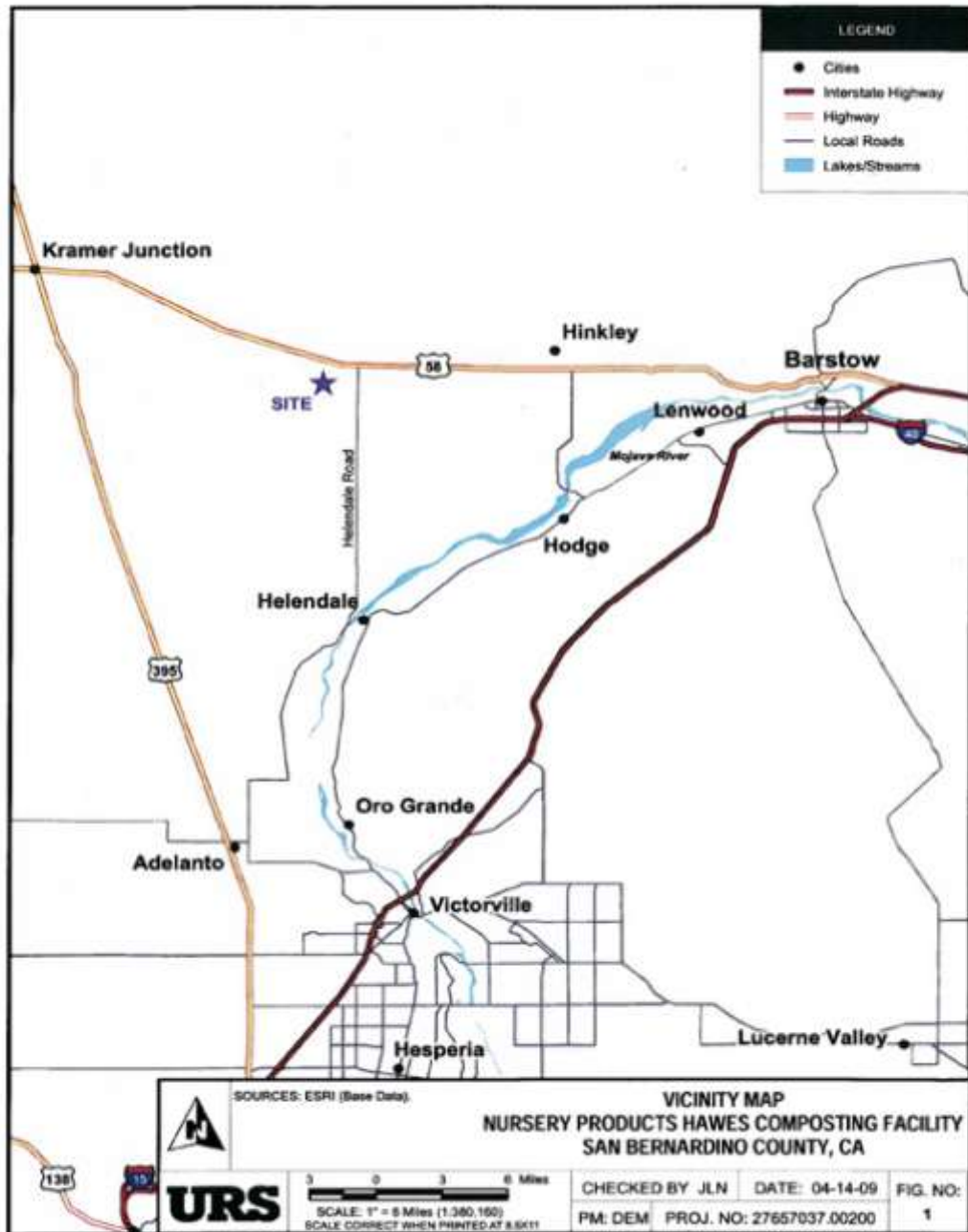
The Council on Environmental Quality (CEQ) National Environmental Policy Act (NEPA) Regulations require the preparation of an EA to determine whether a Proposed Action has the potential to cause significant environmental effects (40 C.F.R. § 1508.9), since this action has not been categorically excluded from such analysis under Departmental or BLM regulation. This EA incorporates by reference (40 C.F.R. § 1502.21) portions of the *Supplemental Environmental Impact Report: Nursery Products, Hawes*, PBS&J, 2009, the CEQA document prepared for the County of San Bernardino to analyze the impacts of the adjacent HCF, as well as other supporting documentation for the EIR that are relevant to the analysis of this project. The CEQA analysis for the HCF included mitigation measures that were adopted by the County and would also apply to any approved access to the site. The adopted CEQA measures that apply to access have been included in the Proposed Action and would apply to any right-of-way grant, if issued, except as modified herein.

This EA includes the scope and purpose of this document, issues identified for analysis, and conformance with laws, regulations, policies, and plans in **Section 1**, a site-specific description of the Proposed Action and alternatives in **Section 2**, a description of the affected environment in **Section 3**, and an analysis of environmental impacts from the alternatives and proposed mitigation measures in **Section 4.0**. These mitigation measures are provided in list form in **Section 5.0**.

1.2 PROJECT BACKGROUND

On May 6, 2006, an Environmental Checklist was issued by the County for the adjacent HCF project. Upon receipt of the NOP later that month, the BLM reviewed the California Environmental Quality Act (CEQA) Initial Study checklist, which did not specify site access, but which indicated that an

Figure 1-1: Regional Location



Environmental Impact Report (EIR) would be prepared to comply with CEQA. This was followed by a Notice of Preparation for the project on June 6, 2006. The Environmental Coordinator of the Barstow Field Office called the Project lead in County Planning in July, 2006 to clarify the scope of the project proposal and to be added to the mailing list for the EIR. At that time, no access was proposed across public lands.

1.3 RELATIONSHIP OF THIS PROPOSAL TO THE HCF PROJECT

The Federal Council on Environmental Quality (CEQ) regulations and BLM policy indicate that consideration of a non-Federal action, such as the HCF project proposal, is limited in NEPA review. Where the non-Federal action may be a connected action, because NEPA is focused on federal decision making, the non-Federal connected action need not be analyzed in the NEPA document as part of a broader analysis. BLM is directed to describe the relationship of the non-Federal action to the BLM Proposed Action.

The County-approved HCF is a connected non-Federal action to the BLM Proposed Action. As such, the BLM Proposed Action may have impacts on the HCF. The BLM could impose limits on the Proposed Action such as amount and time of usage of the road, additional or modified conditions for the conservation of desert tortoise, etc., consistent with FLPMA. If such limits are imposed beyond those already imposed by the County of San Bernardino in the Conditional Use permit and associated Mitigation Measures under CEQA, their effects are analyzed herein. The BLM Proposed Action is conditional upon the continued viability of all County approvals, and associated required permits. The effects on and from the approved non-Federal action are analyzed in the cumulative effects analysis, except to the extent that they may have indirect impacts on the Proposed Action of construction, operation, maintenance of improved commercial access.

1.4 PROJECT LOCATION

The ROW grant is for the improvement, modification, and commercial use of an existing route, which traverses approximately 1.3 miles in a west-northwesterly direction from the County-maintained Helendale Road diagonally across BLM land and then encounters the northeastern edge of the private land on which the HCF has been approved by the County. The portion of the route proposed for upgrade begins approximately 1.5 miles south of SR58 at the route's intersection with Helendale Road, heading to the northwest. The route also continues in a southeasterly direction on the other side (i.e. east) of Helendale Road, where appears to be more regularly used.

The proposed upgrade is located in T9N, R4W, Sec. 6 and T10N, R4W, Sec. 31, San Bernardino Baseline and Meridian (SBBM) on the U.S. Geological Survey (USGS) Twelve-Gauge Lake 7.5 quadrangle map. The route is its broadest where it intersects Helendale Road. As it heads northwest, the unimproved route is approximately 10 to 15 feet wide, with some rough sections where washes are crossed. The route is

lightly used on a regular basis. To the northwest of the HCF the route continues, and becomes more of a two-track as it approaches a large wash approximately one-mile west of the HCF property boundary that is only suitable for 4-wheel drive vehicles with high clearance. Another intermittent 4-wheel track runs north from this route adjacent to the eastern side of the wash on private land that appears to be only intermittently used. On the other side of the drainage, the route terminates at an existing improved route that provides permitted access on a ROW issued by BLM to DoD for the former Hawes Airfield from State Route 58 (Hawes Road).

1.5 PURPOSE AND NEED FOR THE PROPOSED ACTION

The BLM's purpose for the Proposed Action is to provide road access to private lands for an approved industrial use. The BLM's need for the project is in response to an application under Title V of the Federal Land Policy and Management Act (FLPMA) (43 USC 1761) for authorization of a ROW on BLM managed lands, consistent with FLPMA, BLM ROW regulations, and other applicable federal laws. The ROW application is to improve, use, and maintain an existing roadway for commercial access to construct and operate the Hawes Composting Facility on private land. The BLM will decide whether to approve, approve with modification, or deny issuance of the ROW authorization to Nursery Products, LLC for the upgrade and commercial use of the roadway across public lands.

1.6 DESCRIPTION OF CONNECTED ACTIONS

The analysis of the HCF project was conducted and a Draft EIR released by the County of San Bernardino on September 26, 2006, in compliance with CEQA. In the Draft EIR in 2006, effects to adjacent public lands were limited to those that would be addressed, under CEQA, in subsequent agency permitting and review through other federal, State, and regional agencies and their permitting processes. No BLM permits were identified. The Draft EIR did not specify the proposed access route to the facility. At that time, access from the east to the project from Helendale Road was identified as one of two project access options under consideration. No primary access was identified in the EIR, but computations for impacts to other issues were based on access that would connect the project to SR58 northwest of the project area, and therefore would not require access across public lands.

On July 27, 2009, the County issued the Notice of Availability for a Draft Supplemental Environmental Impact Report (SEIR) to further address the two issues directed by the Court as well as greenhouse gases and climate change impacts. After receipt of public comment, the Final SEIR was submitted to the County Planning Commission. The Notice of Determination was issued on December 10, 2009. The action of the Planning Commission was appealed to the County Board of Supervisors which dismissed the appeal and recertified the EIR, the SEIR, and the CUP on July 13, 2010. The County issued a Notice of Determination on July 19, 2010, and shortly thereafter issued a CUP with Conditions of Approval for the HCF.

A list of approved CEQA documents prepared for the County that provide the details of the connected action and include the CUP and Conditions of Approval is included in **Table 1-1**.

TABLE 1-1
APPROVED CEQA DOCUMENTS PREPARED FOR THE HCF BY
THE COUNTY OF SAN BERNARDINO

Draft Environmental Impact Report: Nursery Products, Hawes Composting Facility (DEIR). URS Corporation. State Clearinghouse Number: 2006051021. September 2006. Available online at: http://www.sbcounty.gov/landuseservices/Public%20Notices/Projects/Projects.htm
Final Environmental Impact Report: Nursery Products, Hawes Composting Facility (FEIR). URS Corporation. State Clearinghouse Number: 2006051021. November 2006. Available online at: http://www.sbcounty.gov/landuseservices/Public%20Notices/Projects/Projects.htm
Supplemental Environmental Impact Report: Nursery Products, Hawes Composting Facility. PBS&J. State Clearinghouse Number: 2006051021. December 2009. Available online at: http://www.sbcounty.gov/landuseservices/Public%20Notices/Projects/Projects.htm

1.7 LAND USE CONSISTENCY AND CONFORMANCE

The proposed improvement, widening, use and maintenance of this route across public lands as proposed in the ROW application is consistent with the goals set forth in the California Desert Conservation Area (CDCA) Plan, as amended, including the West Mojave Plan (WMP). The route is located within an area designated as multiple-use class “limited”. It is a designated open route, which means that “(public) access on the route is allowed....Access needs for other uses, such as roads to private land, grazing developments...will be reviewed on an individual basis under the authority outlined in Title V of FLPMA and other appropriate regulations. Each proposal would be evaluated for environmental effects and subjected to public review and comment.”

The proposed project is located in the West Mojave Planning area of the CDCA. In the West Mojave Plan (WMP, 2006), the area surrounding the proposed project was designated as an Area of Critical Environmental Concern for the conservation and recovery of the desert tortoise—the Fremont-Kramer Desert Wildlife Management Area (DWMA). Therefore, the proposed project is subject to specific species and habitat protection measures, including for desert tortoise and the Mohave Ground Squirrel (MGS), as identified under the WMP, and associated biological opinion in addition to additional measures identified for the Proposed Action in this EA. Protection measures incorporated into the Proposed Action include tortoise fencing along the route and installation of three sub-grade culverts to allow desert tortoise and MGS crossings, compliance with DWMA speed limits for use of the road, and all measures identified in the project-specific biological opinion (see Appendix C). With the imposition of these measures, the project is in conformance with the WMP.

1.8 OVERVIEW OF THE ENVIRONMENTAL REVIEW PROCESS

EAs are prepared by federal agencies to aid in determining if a Proposed Action may significantly affect the quality of the human environment. If the Proposed Action will not significantly affect the quality of the human environment, then the agency prepares a Finding of No Significant Impact (FONSI). If the Proposed Action may result in significant effects even after mitigation is implemented, then the agency must prepare an Environmental Impact Statement (EIS) prior to its decision. According to Section 1508.9(a) of the CEQ NEPA Regulations, an EA serves to:

1. Briefly provide sufficient evidence and analysis for determining whether to prepare a FONSI or an EIS;
2. Aid an agency's compliance with NEPA when an EIS is not necessary; and
3. Facilitate preparation of an EIS when one is necessary.

This EA has been prepared to analyze and document the environmental impacts associated with the Proposed Action. BLM will release this EA and a draft FONSI for a 30 day public review and comment period. The FONSI is a finding on environmental effects, not a decision on the ROW permit. After considering comments from the public, the BLM will determine whether to issue a final FONSI, require additional environmental analysis, or to require an EIS. If a FONSI is issued the final decision on the ROW permit will be made at that time. If BLM determines that an EIS is required, it will follow the notice and comment procedures of NEPA applicable to the EIS process.

1.9 ENVIRONMENTAL ISSUES ADDRESSED

In accordance with NEPA, the following potential substantial issues were identified:

- Air Quality;
- Biological Resources;
- Public Health and Safety.

A description of the Proposed Action and alternatives is provided in **Section 2.0**, environmental conditions surrounding the Proposed Action and alternatives are identified in **Section 3.0**, and environmental impacts are evaluated in **Section 4.0**.

1.10 REGULATORY REQUIREMENTS, PERMITS, AND APPROVALS FOR THE ROAD

In addition to the BLM ROW grant, the proposed improvement and use of the roadway could, but will not necessarily, require federal, state, or local permits or approvals. **Table 1-2** identifies each responsible agency and the potential permit or approval required.

TABLE 1-2
POTENTIAL PERMITS AND APPROVALS REQUIRED

Agency	Permit or Approval
State Water Resources Control Board (SWRCB)	National Pollutant Discharge Elimination System (NPDES) General Construction Permit
California Department of Fish and Game	Incidental Take Permit if endangered or threatened species could be affected.
U.S. Fish & Wildlife Service	Consultation under Section 7 of the Endangered Species Act for potentially affected endangered or threatened species

SECTION 2.0

2 PROPOSED ACTION AND ALTERNATIVES

2.1 SUMMARY OF ALTERNATIVES

Two alternatives are evaluated in this environmental assessment. The first alternative is the Proposed Action, as approved in the County of San Bernardino (County) Conditional Use Permit (CUP), submitted to BLM, and further mitigated by BLM as described in this environmental assessment. The second alternative is no action. Other alternatives were considered and dismissed from further analysis in this document. These alternatives are discussed in **Section 2.4**.

2.2 PROPOSED ACTION

The Proposed Action is issuance of a Right of Way (ROW) across BLM-managed public land for the improvement, widening, and commercial use of a 1.3-mile segment of existing roadway to access the future Nursery Products, LLC Hawes Composting Facility (HCF). A hardened road would replace the existing unimproved dirt route and a small strip of land would line the proposed hardened road as described below. The road would be widened to accommodate two-way truck traffic, and the road would be further widened at the junction with Helendale Road, as shown in **Figure 2-1** to allow for turning onto or off of Helendale Road at no more than a 90-degree angle. Within five years, this hardened road would be paved to County Road standards. The proposed ROW would cover a total of approximately 6.5 acres of land, including the existing unimproved route. The HCF access route is currently designated as open for casual use, and the improved road would remain available for public use.

The proposed road is designed to accommodate large trucks capable of carrying an average of 1,100 tons of biowaste per day to the HCF site. The number of trucks anticipated per day is approximately 48. Employees and vendors will account for about 10 additional vehicle-trips per day in passenger vehicles or pickup trucks. The County has specific road design standards for this type and level of use, which are incorporated by reference into the Proposed Action (see Appendix D).

The County has imposed mitigation measures which were documented in their Mitigation and Monitoring Program (MMP; Section 5.3 of the DEIR, URS, 2006a) and CUP, including specific mitigation measures related to access. The following terms are specifically included as part of the Proposed Action to ensure compliance with the permits issued by the County for the project:

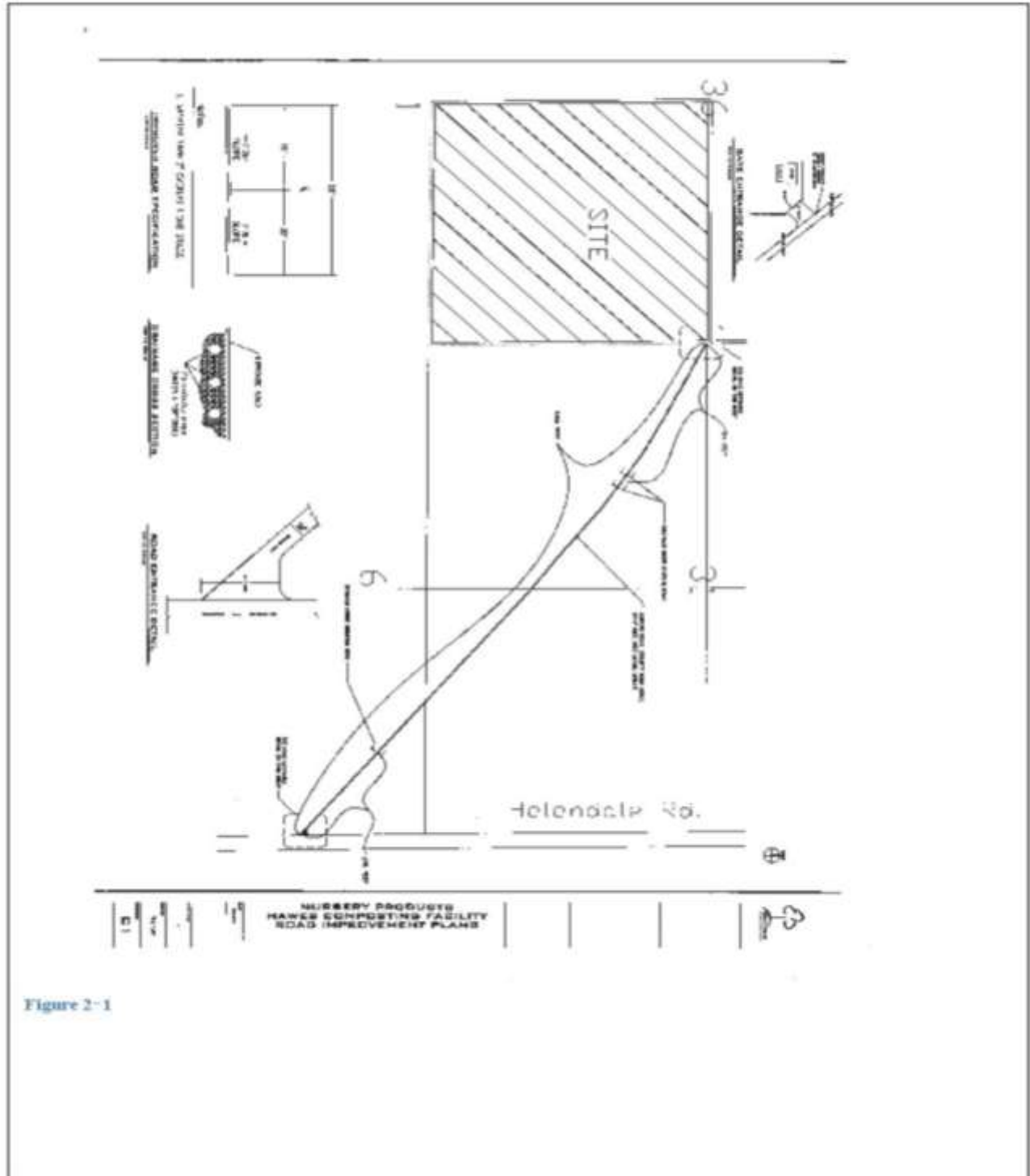
- The Applicant shall provide paved access to the HCF site from a County-maintained road;
- Cross-country (off-road) vehicle use shall be prohibited and signs posted;
- Except on paved roads with posted speed limits, vehicle speeds shall not exceed 20 miles per hour through desert tortoise habitat. Any tortoises encountered on the roads shall be avoided by drivers (i.e. driver will stop and wait for tortoise to cross road);
- Prior to commencing ground-disturbing activities, the applicant shall submit, and the County shall review and approve, evidence of financial ability to properly manage conserved habitat and to monitor the impact of the HCF project on surrounding habitat;
- Permanent tortoise proof fencing (one-inch by two-inch mesh hardware cloth) shall be erected and maintained between the interface of the road shoulder and desert tortoise habitat prior to initiating road construction. The fence will be placed along the length of the road to protect desert tortoise and prevent the species from wandering onto the road. The fence will be placed within the outer edge of the road ROW, outside the road shoulder. Fence installation will be overseen by a qualified tortoise biologist. Upon completion of clearance surveys and the installation of desert tortoise exclusion fencing, an authorized biologist will remain “on call” during construction activities. Vegetation clearing activities will occur only after the desert tortoise exclusion fence is installed and clearance surveys are completed; All employees, subcontractors, construction personnel, and other individuals who work onsite shall participate in an awareness program addressing desert tortoise, burrowing owl, and other federally- and state-protected species at the HCF site prior to ground disturbing activities. The program shall be administered by a qualified biologist. It may be given in the field, and shall include truck drivers, delivery personnel, and other HCF related personnel occasionally entering the work site. Wallet-sized certification cards shall be provided to personnel who have attended the training, and personnel shall carry those cards when working onsite; and
- Surveys shall be conducted for desert tortoise and Mohave ground squirrel on the existing roadway prior to any construction. A qualified biologist will be onsite during the construction of the fencing and road and shall, during construction report monthly to the USFWS and the California Department of Fish and Game (CDFG) in regard to the desert tortoise and Mohave ground squirrel.

In addition, the ROW would be subject to all terms and condition of the Biological Opinion (Appendix C), obtaining any applicable additional permits for the HCF and/or ROW access road, such as Air Quality permits issued by the Mojave Desert Air Quality District. The California Department of Fish and Game (CDFG) issued the incidental take permits (ITPs) for desert tortoise, Mohave ground squirrel on November 21, 2010 and pertinent measures from these (ITPs) are incorporated into the Proposed Action (**Appendix F**).

The ROW grant is proposed for a total width of 44 feet, 28 feet of which would be paved, widening to a width of 72 feet, 56 feet of which would be paved, at the intersection with Helendale Road. The road will taper to the paved width of 28 feet over the distance of 300 feet from Helendale Road toward the HCF site, and will maintain a finished, useable paved width of 28 feet to the HCF to accommodate two-way truck traffic. The location of the proposed road will be centered on the existing roadway in order to minimize new impacts to federal land. The ROW will also include six feet of unpaved soil “shoulder” on each side of the paved road, and a tortoise fence adjacent to the road shoulder. From the centerline to the edge of the pavement, the proposed road will have a two percent slope.

Grading activities for the Proposed Action include the widening of the intersection at Helendale Road and the roadway, the grading of a shoulder, upgrading the surface of the existing route to a hardened surface, and installing under-crossings and fencing consistent with the biological opinion for conservation of desert tortoise. All proposed grading activities use materials and procedures employed by California Department of Transportation. Refer to **Figure 2-1** for graphic representation of the road and improvements thereto.

Figure 2-1: Proposed Access Route and Tortoise Under-Crossings Cross-Sectional View



As shown in **Figure 2-1**, the sub-grade tortoise crossings will be installed at three locations. At each location, the crossing will extend under the road to meet the desert tortoise fence. The applicant will maintain these crossings during the life of the project.

The road is proposed to be paved with non-asphaltic, soil cement that meets California Department of Transportation (Caltrans) standards. This surfacing would be completed prior to the initiation of operational activity at the HCF. Prior to pavement with soil cement, the unpaved roadway would be sprayed with water frequently enough to minimize the generation of visible dust during construction activities. All water used for dust suppression purposes during road construction will be trucked in. No groundwater resources will be used for dust suppression.

The Proposed Action also incorporates installation of an approved, permanent street sign on the nearest paved street corner to the project. The nearest corner is the junction with Helendale Road. Signs prohibiting the use of cross-country (off-road) vehicles would also be posted. Additional signs would be posted by the applicant to raise awareness of, and prevent impacts to, the desert tortoise by vehicular traffic.

2.3 ALTERNATIVE B: NO ACTION ALTERNATIVE

Under the No-Action Alternative, the BLM would not take action to approve a ROW application for access across public lands. The existing roadway from Helendale Road to the edge of the facility would continue to be unimproved, and would continue to be used by the public. Access to the County-approved HCF project site from the County maintained Helendale Road would not be authorized. Alternative access would have to be identified and approved across private lands to the HCF facility.

2.4 ALTERNATIVES CONSIDERED AND REJECTED

A new, shorter and straighter route could be constructed at the boundary of private lands towards the north or east. In addition, there is alternative access from SR 58 to the northwest, using a north-south intermittent route off of SR58 which connects to the same route as the Proposed Action, but from the opposite direction (northwest) across other private lands. These options are addressed in this section, and for the reasons set forth below, were not carried forward for analysis.

2.4.1 Alternative C: New Road on Previously Undeveloped BLM Lands

Alternative C is the construction of a new, shorter road traveling due east from the HCF site across federal lands located in Section 31 to connect with Helendale Road as show in **Figure 2-2**. The new road would be built to the same width as the Proposed Action, but would not require expansion at the intersection with Helendale Road for turning, because the new road would be perpendicular to

The map displays the Hawes Army Airfield area. A red rectangle indicates the 'HCF Site'. A yellow line represents 'Alternative U'. The map includes a legend, a scale bar (0 to 2,000 feet), and a north arrow. The HCF Site is outlined in red, and Alternative U is a yellow line. The map also shows the Hawes Army Airfield, various roads, and topographic features.

— Nursery Products, LLC Environmental Equipment / 2005/2006 ■

2-15

Helendale Road. The new road under Alternative C would be built on previously undeveloped and undisturbed land, and would be one mile in length.

Construction of this new road would result in conversion of additional habitat to pavement or road base material, with the accompanying additional loss of native vegetation over the long term within the new road right-of-way. Construction of a new road would particularly impact additional critical desert tortoise habitat within a BLM-designated DWMA. The West Mojave Plan strongly discourages new roads in DWMA, if alternatives exist. The presence of a new road would also result in additional habitat fragmentation if the existing route continues to be used. Alternatively, if the existing route is closed and rehabilitated as part of the project plan for development of the new road, it would be some time before it would be available as suitable habitat. For the reasonably foreseeable future, critical habitat covering both roads would be affected and unavailable for use by the desert tortoise, MGS and other species, and enforcement of the closure during reclamation activities and habitat recovery would require additional long-term law enforcement monitoring.

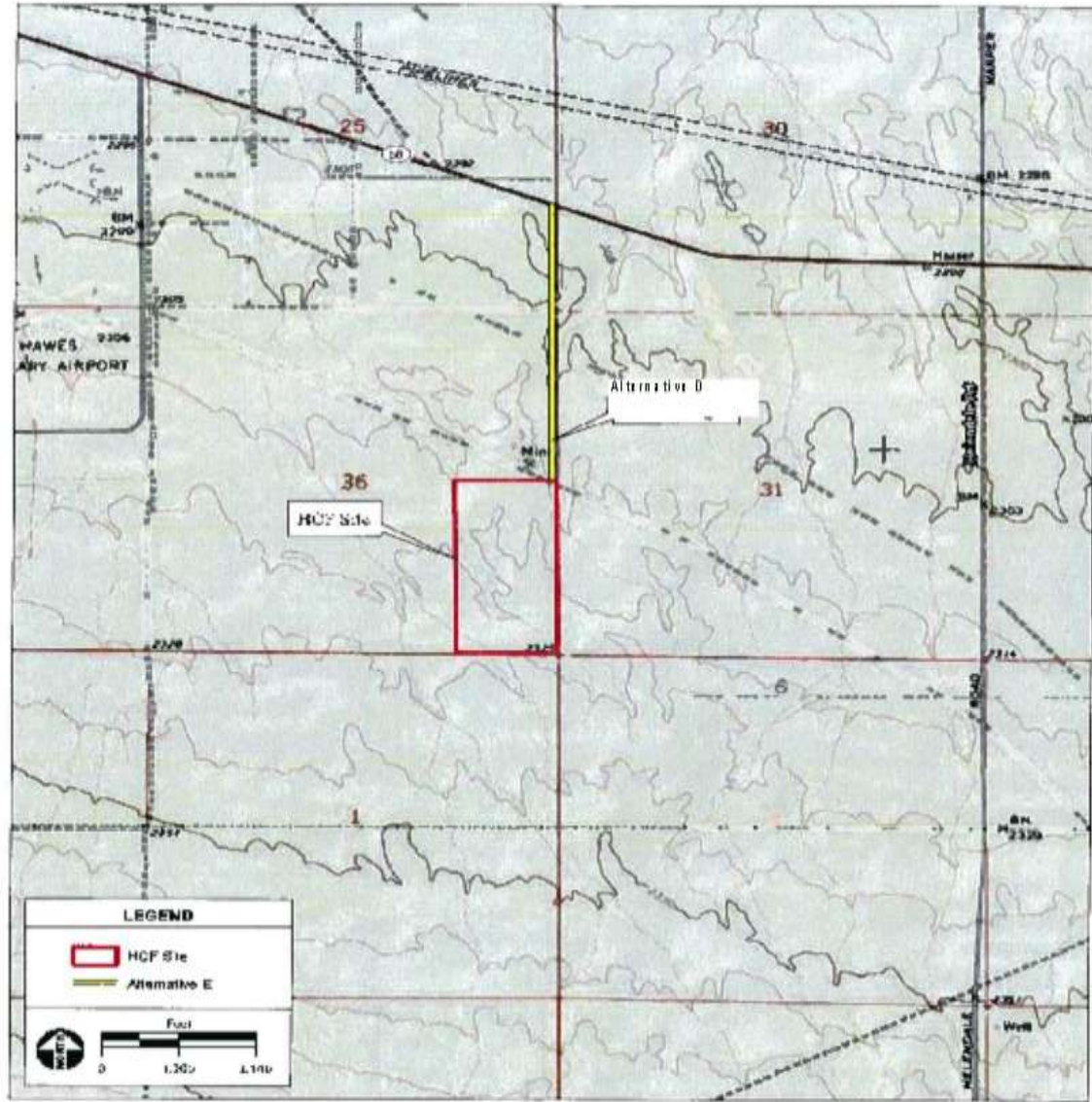
As such, Alternative C involving new road development was rejected because new road construction would result in adverse effects to additional critical desert tortoise habitat that has been dedicated to conservation and recovery of the species, without substantially decreasing impacts to other resource values, and therefore would be environmentally inferior to the Proposed Action.

2.4.2 Alternative D: Road North of the HCF Site

Alternative D is the construction of a completely new road traveling due north from the HCF project site across private lands located in Sections 36 and 25 to connect with State Route 58, as show in **Figure 2-3**. This is the most feasible private land alternative to the Proposed Action, because it would occur along the private/public land property boundaries across fewer parcels. The current roadway's alignment west of the approved facility runs diagonally through private land parcels then along an improved two track that follows north-south private/public land property boundaries. Depending upon the width of easements along the edge of private property, some public land may still be required. The new road would be built to the same width as the Proposed Action, and may require widening or a small diversion from the property boundary near SR58 to meet the highway at a perpendicular. In addition, a new intersection with SR58, that is, improvements to SR58 to meet State highway standards, would be required. The route would be just under one mile in length, and as with Alternative C, would be built on previously undeveloped and undisturbed land.

The loss of habitat is essentially the same as Alternative C. The advantage of this alternative over Alternative C is that it would most likely result in less direct habitat loss in public lands designated as a DWMA by BLM for conservation and recovery of desert tortoise. However, the overall loss of vegetation, conversion of additional critical habitat to a hardened road base and indirect impacts to the DWMA from additional habitat fragmentation would still occur.

Figure 2-3: Alternative Route D



SOURCE: "Twelve Gauge Lake, CA" USGS 7.5 Minute Topographic Quadrangle, 1:25,000 Scale, Section 35, San Bernardino Basins & Mojave, AES, 2010

Source: Producers, LLC

Figure 2-3: Alternative Route D

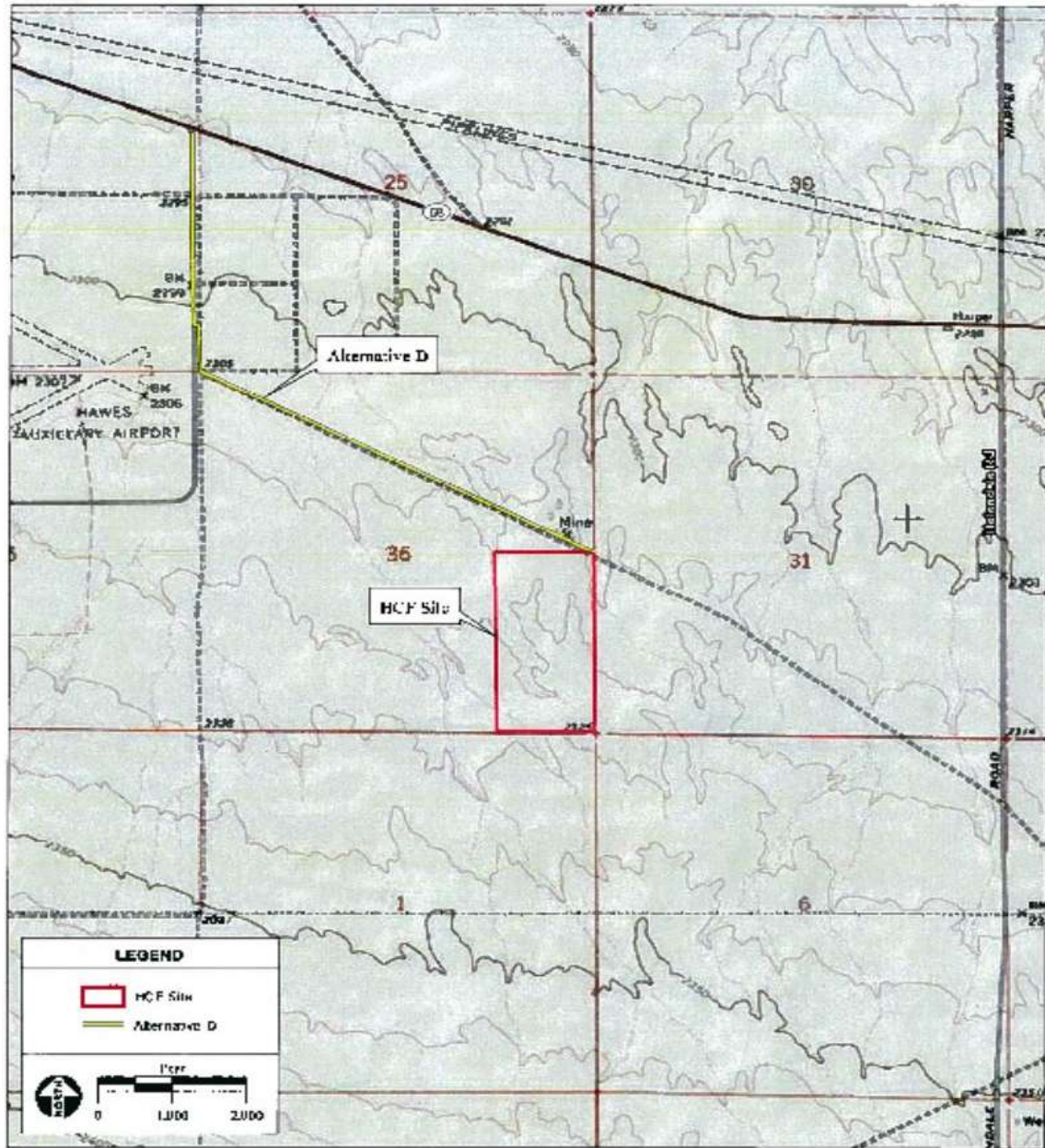
Therefore, Alternative D involving new road development was also rejected for further consideration because it would result in adverse effects to additional critical desert tortoise habitat that has been dedicated to conservation and recovery of the species, without substantially decreasing impacts to other resource values, and therefore would be environmentally inferior to the Proposed Action.

2.4.3 Alternative E: Road Northwest of the HCF Site

The third alternative (Alternative E) as shown in Figure 2-4, was considered and dismissed from further analysis is the original Proposed Action in the CEQA process, and discussed as the primary option in the CEQA documents. This alternative accesses the facility from the opposite direction on the same existing unimproved route. The route meets with a north-south intermittent existing dirt route located on the east side of a substantial wash. This route is located along the boundary of private property northwest of the HCF site adjacent and parallel to Hawes Road. The north-south intermittent route would also need to be upgraded to Highway 58. This alternative would create a new commercial intersection with State Route 58. Implementation of the improvement measures as detailed in the MMP, CUP, BO, and ITPs, as well as commercial use of this alternative require legal approval from all private landowners. An unwillingness to cooperate by any one private landowner is sufficient to render this route infeasible. The BLM has consulted with the County and the applicant and has determined that access easements from the affected private parcel landowners on the existing routes are not anticipated in the reasonably foreseeable future; therefore this alternative is not currently within the reasonable range of alternatives.

Alternatively, the access to the northwest of the HCF site could continue across the major wash to meet up with Hawes Road to connect with SR 58 using an existing access point, and affect fewer private landowners. This alternative has also been considered and dismissed. This upgrade would create a substantially upgraded through-route between Helendale Road and SR 58 that does not currently exist because of a natural topographic barrier (the wash). The additional construction across this major wash would also result in substantial additional impacts and permitting. This alternative, if feasible, would result in adverse effects to additional critical desert tortoise habitat that has been dedicated to conservation and recovery of the species, without substantially decreasing impacts to other resource values, and therefore would be environmentally inferior to the Proposed Action.

Figure 2-4: Alternative Route E



Source: HCF Site Design Data, 1:4" = 115.0' Scale Topographic Quadrangle, T10N R5W Section 26, San Bernard and Madison, ARS, 2010

Navajo Production, J.E.C. Environmental Assessment / 209518

Figure 2-4
Alternative Route D

SECTION 3.0

3 DESCRIPTION OF AFFECTED ENVIRONMENT

This section describes existing resources in the project area that may be affected by the construction, maintenance and decommissioning activities associated with the widening and upgrade of the route for commercial access to and from the Nursery Products LLC Hawes Composting Facility (HCF) site from Helendale Road. Potentially affected resources include: water resources, air quality, biological resources, including special status species, migratory birds, and invasive species, cultural resources, land use patterns, public health and safety, and solid wastes. Several resources are either not affected or not present. The potentially affected and unaffected resource values and uses are summarized in **Table 3-1**. Impacts associated with the connected action of construction, operation and decommissioning of the HCF are further addressed in the cumulative impacts section of this document.

Additional detailed information on existing resources in the area is also provided in the following documents:

- In the Nursery Products Hawes Composting Facility Draft Environmental Impact Report (EIR, URS, 2006a);
- In the Final EIR including the Supplemental EIR;
In the Revised Habitat Conservation Plan (HCP) for the Issuance of an Incidental Take Permit Under Section 10(a)(1)(B) of the Endangered Species Act for the Federally Threatened Desert Tortoise for Nursery Product's Proposed Recycling Facility, Helendale, San Bernardino, County (HCP; Michael Brandman Associates, 2008a), (the revised HCP was never approved for the project – ESA was addressed through the Section process BLM conducted with the USFWS – i.e., the Biological Opinion
- In the California DFG incidental take permit for this project generated for the HCP; and
- In the Biological Opinion (see **Appendix C**).

3.1 ENVIRONMENTAL SETTING

The proposed access upgrade begins on the east at Helendale Road, a County maintained, improved road. Helendale Road continues north of State Route 58 (SR 58) as Harper Road. The upgrade terminates almost a mile west at the northeast edge of the HCF site, although the unimproved route continues for another 1.5 miles, terminating at a substantial wash just east of a route known as Hawes Road that was built to access a now reclaimed military facility. The HCF site is approximately 20 miles west of the City of Barstow, 8 miles west of Hinkley, 12 miles

north of the Silver Lakes community at Helendale, and 12 miles east of Kramer Junction. The closest paved road is State Route 58, just over 1 mile to the north.

This area is located within the Centro Subarea of the Mojave River Basin, which is generally flat with a very slight gradient towards the north. The Centro Subarea is part of a desert basin that is filled with alluvium sporadically interrupted by remnants of old ridges. Adjacent areas to the north, south, east, and

TABLE 3-1: STATUTORY DETERMINATIONS¹

Issue	Relevance	Relevant Authorities
Adverse Energy Impacts	Not relevant—No adverse energy impacts are anticipated from the Proposed Action or alternatives.	Executive Order 13211; Energy Policy Act of 2005
Air Quality & GHG	Relevant—Air quality impacts may result. Greenhouse gas impacts are not anticipated from the Proposed Action.	The Clean Air Act
Areas of Critical Environmental Concern	Not relevant—No ACEC are in the project area or area of potential effect.	FLPMA
Cultural Resources	Not Relevant—based on consultation and survey results (see Chapter 3), no significant cultural resource impacts are anticipated in the area of potential effect.	NHPA
Environmental Justice	Not relevant—No environmental justice impacts are anticipated to specified populations from the Proposed Action or alternatives.	E.O. 12898
Farm Lands (prime or unique)	Not relevant—No prime or unique farm lands are in the project area or area of potential effect.	Farmland Protection Policy Act (FPPA)
Floodplains	Not relevant—No frequently flooded (100-year floodplain) areas are in the project area or area of potential effect.	E.O. 11988
Invasive, Nonnative Species	Relevant—Invasive, non-native species may result from the Proposed Action.	Lacey Act; Federal Noxious Weed Act; Endangered Species Act; E.O. 13112
Land Uses	Relevant—Proposed Action adds commercial access to existing casual-recreational and private-land access use.	FLPMA
Migratory Birds	Relevant—Human activities may increase raven and other predatory bird densities.	E.O. 13186
Native American Religious Concerns	Not Relevant—based on consultation and survey results (see Chapter 3), no Native American Religious concerns are anticipated in the area of potential effect.	American Indian Religious Freedom Act of 1978
Threatened or Endangered Species	Relevant—T&E species may be affected.	Endangered Species Act
Wastes, Hazardous or Solid	Relevant—Some solid wastes may result. Not relevant for hazardous wastes—No hazardous wastes are proposed for generation in this project.	Resource Conservation and Recovery Act; Oil Pollution Act of 1990; CERCLA; SARA
Water Quality Drinking/Ground	Not relevant—No drinking water sources are in the project area or area of potential effect and no ground water resources are proposed for use in the project.	Clean Water Act; Safe Drinking Water Act; E.O. 12088, 12580 and 12372
Wetlands/Riparian Zones	Not relevant—No wetlands or riparian areas are in the project area or area of potential effect.	E.O. 11990
Wild and Scenic Rivers	Not relevant—No wild and scenic rivers are in the project	Wild and Scenic Rivers Act

¹ Statutory Conformance determinations are made for certain issues that are subject to identified statutory, regulatory, or executive order (E.O.) requirements in addition to FLPMA and NEPA.

TABLE 3-1: STATUTORY DETERMINATIONS¹

	area or area of potential effect.	
Wilderness	Not relevant—No wilderness areas are in the project area or area of potential effect.	FLPMA; Wilderness Act

west of the existing route are undeveloped vacant land. A few small washes dissect the route, trending generally southwest from the Kramer Hills towards the northeast towards SR 58. The entire area is within the Mojave River watershed, and the river is located approximately 8.5 miles south of the project area at its closest point.

The Soil Survey of San Bernardino County, California, Mojave River Area, indicates that soils in the potential area of effect are not susceptible to sheet and rill erosion by water and if undisturbed, their erodibility by wind is slight (USDA, 1986). However, most desert soils that are disturbed, including the existing route proposed for upgrade, are highly erodible. Frequency of use and loss of vegetation increases the susceptibility to wind erosion. Portions of this route have no vegetation and are therefore highly susceptible to erosion. Other portions of the route exist as two-tracks with more or less intact vegetative substrate between them, and are therefore somewhat less erodible. The area is not on or adjacent to any identified earthquake fault zone. For more information regarding geology and seismicity in the surrounding region, please refer to the Draft EIR (Section 5.3; URS, 2006a).

3.2 WATER RESOURCES

The Mojave Desert is the driest desert in the continental United States. Precipitation averages approximately 4.5 inches per year, with much of the rain falling from October to March. Temperatures range from 40 to 110 degrees Fahrenheit (°F), with large diurnal to nocturnal swings averaging 20-30 °F throughout most of the year. The Proposed Action lies outside the 100-year flood hazard zone as defined by the Federal Emergency Management Agency (FEMA). Infrequent thunderstorms during the summer and fall may produce occasional flash floods (URS, 2006a).

3.2.1 Waters of the U.S.

BLM determines whether jurisdictional waters may be affected by projects proposed on public lands, and if so, consults with the U.S. Army Corps of Engineers (USACE) as to any required permits. The term “waters of the U.S.” is defined as:

- All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide;
- All interstate waters including interstate wetlands; or
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mud flats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use degradation of which could affect interstate or foreign commerce including any such waters (40 CFR 230.3).

The USACE was consulted on this project, and, in a letter dated March 28, 2008, the USACE determined that the Proposed Action “would not discharge dredged or fill material into a water of the U.S. or an adjacent wetland. Therefore, the project is not subject to [USACE] jurisdiction under Section 404 of the Clean Water Act and a Section 404 permit would not be required” (see **Appendix B** for a copy of the letter).

3.2.2 Surface Water

A couple of small ephemeral washes dissect the route, trend southwest to north-northeast, and have their origin in the Kramer Hills southwest of the project area. When rain occurs, it may result in high-rates of runoff caused by intense, relatively short-term rain events. These events will produce storm water drainage that would generally flow in the same direction as the washes, and may result in waste water flows from the future HCF project area running onto public lands. In order to protect local water quality, the Lahontan Regional Water Quality Control Board has developed waste discharge requirements (WDR) for the adjacent HCF in the Waste Discharge Requirements for Nursery Products Hawes Composting Facility, San Bernardino County (WDR 2010-0010; RWQCB, 2010). The WDR specifies measures that will be taken at that facility to assure all storm waters are managed and remain onsite, including construction of surface impoundments.

The major surface drainage of the watershed is the Mojave River, which is located 8.5 miles to the southeast, on the south side of Iron Mountain and further east of the project area in Barstow. Most intermittent surface water flow in the vicinity eventually terminates at Harper Lake 7.5 miles north-northeast of the project area on the other side of SR 58, or if redirected by drainage structures, into the Mojave River valley in the vicinity of Barstow. Due to the distance, site runoff would rarely reach either Harper Lake or the Mojave River, but would have evaporated. No springs or natural surface water resources with substantial surface flows are known within 10 miles of the Proposed Action area except for these two water bodies.

According to FEMA, the project area is located within a 500-year floodplain, which is the category for most lands in the Mojave Desert that are remote from substantial water bodies. This means that flood flows rarely occur, and when they do, they are generally the result of flash floods and flows generally follow the local flow pattern. In this area that would be into and down the ephemeral washes north towards SR 58. Drainage structures have been constructed in association with the upgrade of SR 58 to direct any large flood flows away from or underneath the highway. For additional discussion regarding surface water in the vicinity of the Proposed Action, please refer to the DEIR (Section 4.7; URS, 2006a).

3.2.3 Groundwater

The Proposed Action is located in the Harper Valley Groundwater Basin. This groundwater basin contains three interconnected aquifers, the Centro floodplain aquifer, the Centro regional aquifer, and the Harper Lake regional aquifer. Groundwater flow in the regional aquifers is toward the north to northeast. On March 19, 2009, depth to groundwater was measured in a deep on-site boring and was determined to be approximately 365 feet below ground surface (bgs); the following day, groundwater level stabilized at 305.1 feet bgs. No groundwater from the area is proposed for the construction, operation, or maintenance of the improved roadway. Water may be used during construction and operations for dust suppression activities. HCF is proposing to use recycled waste waters for dust suppression on the project site, and has not yet identified its source for any dust suppression water for the access route.

3.3 AIR QUALITY

The Proposed Action is located within the Mojave Desert Air Basin (MDAB), which contains mountain ranges interspersed with long broad valleys that often contain dry lakes. The prevailing wind direction in the MDAB is from the west and southwest. Air masses pushed onshore in Southern California by differential heating are channeled through the MDAB, and, because of these natural phenomena, the air quality in the MDAB is largely influenced by the air quality incoming from the South Coast and South Central Coast air basins (Los Angeles, Ventura, and Santa Barbara Counties).

The Environmental Protection Agency (EPA) enforces National Ambient Air Quality Standards (NAAQS), and the California Air Resources Board (CARB) has developed and enforces State Ambient Air Quality Standards (SAAQS) that meet or exceed the EPA federal standards. The Mojave Desert Air Quality Management District (MDAQMD) regulates local air quality in the vicinity of the Proposed Action. Air basins (or portions thereof) are classified as either “attainment”, “non-attainment”, or “unclassified” with respect to NAAQS and SAAQS, based on whether or not those standards have been demonstrated as being achieved. MDAQMD prepares air quality plans containing emissions reduction strategies for those areas in the MDAB designated as “non-attainment.”

According to NAAQS, the Proposed Action is located in a region is designated as moderate non-attainment for PM_{10} and moderate non-attainment for O_3 ; no NAAQS exist for visibility-reducing particles (EPA, 2010). According to NAAQS, the region is in attainment or unclassified for carbon monoxide (CO), nitrogen oxides (NO_x), sulfur oxides (SO_x), and $PM_{2.5}$.

According to CARB, the project area is designated as non-attainment for PM_{10} , $PM_{2.5}$ and ozone (O_3), is in attainment for CO, NO_x , SO_x , Lead, and Hydrogen Sulfates, and is unclassified for visibility-reducing particles under SAAQS (CARB, 2010).

The MDAQMD and the CARB collect ambient air quality data through a network of air monitoring stations throughout San Bernardino County. These data are summarized annually and published by the CARB on its website. The closest air monitoring stations to the project area are at Lancaster to the west, Victorville to the southwest, and nearby Barstow just southeast of the site. All three sites measure and periodically record exceedances to the National and State O_3 standards, and both Victorville and Lancaster also measure and periodically record exceedances to the State PM_{10} standard. These exceedances tend to be most prevalent during windy spring months.

3.3.1 Federal Conformity Determinations

NAAQS apply to determining federal conformity with air quality standards for projects which are located on federal land. The EPA defines federal de minimis levels, that is, the minimum federal threshold for which a conformity determination must be performed, for various criteria pollutants in various areas (40 CFR 93 § 153). When the total direct and indirect emissions from an action are below the de minimis

levels, the action is not subject to a federal conformity determination. Federal de minimis standards for Ozone (O₃) and PM₁₀ are described in **Table 3-2** below.

TABLE 3-2
FEDERAL DE MINIMIS THRESHOLDS FOR THE PROJECT AREA
OZONE AND PM₁₀ EMISSIONS

Criteria Pollutant	Area Type	Tons Per Year (tpy)
Ozone (VOC ¹ or NO _x)	Moderate Nonattainment	100
PM ₁₀	Moderate Nonattainment	100

¹ Volatile Organic Compounds

3.3.2 Greenhouse Gas (GHG) Emissions

California has been a leader among the states in outlining and aggressively implementing a comprehensive climate change strategy designed to result in a reduction to 1990 levels of total statewide GHG emissions. California's climate change strategy is based on AB 32 which sets forth a multifaceted approach being implemented by CARB. Explicit GHG thresholds have not been established at the local level by the MDAQMD, CARB, or the County. However, the San Bernardino General Plan identifies energy-reducing policies that, once adopted, will aim to lower overall carbon dioxide (CO₂) emissions in the County. Please refer to the SEIR (Section 4.1; PBS&J, 2009).

3.3.3 Sensitive Receptors

Some land uses are considered more sensitive to air quality, due to the types of population groups or activities involved. Land uses such as schools, hospitals, and convalescent homes are considered as more sensitive than the general public to decreased air quality because the young, the old, and the infirm are more susceptible to respiratory infections and other air quality-related health problems. Residential areas are also considered as more sensitive to decreased air quality because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in more sustained exposure to any pollutants present.

There are no sensitive receptors (i.e. schools, hospitals, etc.) within eight miles of the project site. The Proposed Action is located within a sparsely populated area of southeastern Mojave Desert. There is a single residence 1.5 miles to the east. A second residence is 2.3 miles to the east. There are no receptors (residences) within a distance of at least five miles to the north, west and south. The community of Hinkley is approximately eight miles to the east. The first developed area to the west is Kramer Junction at a distance of approximately 12.3 miles.

3.4 BIOLOGICAL RESOURCES

3.4.1 Biological Setting

The Proposed Action is located in the Mojave Desert in gently rolling open terrain dominated by desert scrub vegetation. Habitats in this region of the Mojave Desert vary with the landscape and precipitation levels. The habitat in and surrounding the Proposed Action is comprised of desert saltbush scrub, with elevations between 2,300 to 2,320 feet above mean sea level (msl). Precipitation averages 4.5 inches per year.

The vicinity is generally considered undisturbed habitat. This includes occupied suitable habitat to support desert tortoise, although densities are not high in this area. The site also supports potentially suitable habitat for Mojave ground squirrel. In addition to the route under consideration for the proposed ROW grant, minor area disturbances exist nearby. These include old mining pits that are no longer being worked north of the route, Hawes Road about 1.5 miles west of the proposed upgraded route, the abandoned Hawes Airfield on the west side of Hawes Road, a small disturbance on the northern portion of the HCF site near the access route, and a few platted private land boundary roads near Hawes Road. Representative photographs of the project and HCF vicinity are included in **Figure 3-1**.

3.4.1.1 Special-Status Species

The area is within critical habitat for the Federal and State Threatened desert tortoise, and was designated as a Desert Wildlife Management Area (DWMA) for protection, conservation and recovery of the species in the 2006 West Mojave Plan (WMP, BLM). The project area is also within an area designated in the WMP as a Mohave Ground Squirrel Habitat Conservation Area.

Four special-status wildlife species were identified in the vicinity of the Proposed Action during biological surveys conducted by URS in spring 2006. The first is the federal- and State-listed species, desert tortoise (Federal and State threatened), and other three are California Special Species of Concern (CSSC), including the northern harrier (*Circus cyaneus*, CSSC) sage sparrow (*Amphispiza belli*, CSSC), and California horned lark (*Eremophila alpestris actia*, CSSC). The Mohave ground squirrel (MGS), a State-listed as threatened species, was not detected during the 2006 spring, non-protocol surveys (Section 4.4; URS, 2006a).

One three-day protocol-level survey for the MGS was conducted in the spring of 2008 (Sundance Biology, Inc., 2008, included in Attachment 2 of Appendix G. No MGS were located during this survey. However, MGS spend only short periods of time above-ground, and their season of presence varies widely from year to year (Appendix H: Final WMP, Appendix M, 2005). For these reasons, multiple trappings over multiple years are required to determine the absence of the species within suitable habitat. It was determined that the project site provides suitable habitat for both the desert tortoise and the Mohave ground squirrel (Michael Brandman Associates, 2008a). The MGS is a State-listed species and is included in the CDFG incidental take permit which includes both the access road area and the HCF (**Appendix F**). Detailed MGS surveys are found as Appendix C of the draft HCP which was submitted to

Figure 3-1 – Site Photographs



PHOTO 1
View of McLeodale Road and Right of Way into vicinity.



PHOTO 2
View from the entrance to the 1.3 mile Right of Way from McLeodale Road.



PHOTO 3
View from the northeast corner of the HCP site to the Right of Way looking northwest. Note the old mine and general disturbance in the area.

SOURCE: ARS 18 v

Nursery Products, LLC Environmental Assessment / 2005/02 ■

Figure 3-1
Site Photographs

BLM as the document containing all of the biological surveys and was included as Attachment 2 in the Biological Assessment which was submitted to US Fish and Wildlife Service (USFWS) during the Section 7 consultation. Section 7 Consultation was initiated by BLM with the USFWS for the Federal and State-listed desert tortoise (**Appendix A**).

Two special status plant species potentially occur in the area, the Barstow Woolly Sunflower (*Eriophyllum mohavense*) and the Desert Cymopterus (*Cymopterus deserticola*). Neither plant is federal- or State-listed, but both plants are federal species of special concern as well as BLM-sensitive species and CNPS 1B.2 species that are endemic to the West Mojave Planning area. The Barstow Woolly Sunflower was a candidate for federal listing and was dropped because of measures identified in the WMP (Appendix H: Final WMP, Appendix M, 2005). It occurs primarily in the vicinity of Kramer Junction and further north of the project area, and is generally, although not exclusively, found in the creosote-bush scrub vegetation community. The Desert Cymopterus occurs primarily north and west of the project area. The closest known sitings are in the vicinity of Harper Dry Lake to the north and near Kramer Junction to the west. It occurs in Mojave creosote bush scrub, desert saltbush scrub, and Joshua tree woodland with creosote bush scrub or desert saltbush scrub understory (Holland 1986). The presence of both species varies widely from year to year, depending on climatic conditions. Neither species was detected during the 2006 biological surveys, but due to their yearly variation, they may occur in the area of potential effect.

3.4.1.2 Flora and Fauna

A single vegetation type, desert saltbush scrub, is present throughout the vicinity of the Proposed Action. This vegetation community consists of typically flat areas of low-growing, grayish, microphyllous shrubs up to a meter in height, with some succulent species and low-growing annuals. Desert saltbush scrub is usually dominated by a single *Atriplex* species and very few other shrubs. The saltbush scrub in the vicinity of the Proposed Action is dominated by *Atriplex polycarpa*, with sparse creosote (*Larrea tridentate*), and occasional cotton-thorn (*Tetradymia spinosa*). The herbaceous understory included Mediterranean schizmus (*Schizmus barbatus*), which is a non-native invasive species, Storke's bill (*Erodium* spp.) seedlings, and desert herb (*Chorizanthe rigida*). Cryptogamic crusts were interspersed throughout the area. Non-native plant species currently occur within the project area adjacent to the route, generally at low densities where adjacent lands are not disturbed and in higher densities within the roadway, where it is not devoid of vegetation.

Wildlife species that were detected included white-tailed antelope squirrel (*Ammospermophilus leucurus*), black-tailed jackrabbit (*Lepus californicus*), common raven (*Corvus corax*), black throated sparrow (*Amphispiza bilineata*), cactus wren (*Campylorhynchus brunneicapillus*), and red-tailed hawk (*Buteo jamaicensis*). Snake, lizard and rodent tracks and burrows were observed throughout the area.

3.4.2 Regulatory Framework

1.1.1.1 Federal Endangered Species Act

The USFWS enforces the provisions of the Federal Endangered Species Act of 1973 (hereafter, “FESA,” 16 USC § 1531 *et seq.*). Threatened and endangered species on the federal list (50 CFR § 17.11, 17.12) are protected from take, which is defined as direct or indirect harm, unless either a permit is granted under Section 10(a)(1)(B); or a BO with incidental take provisions is rendered under Section 7. Pursuant to the requirements of FESA, an agency reviewing a Proposed Action within its jurisdiction must determine whether any federally listed species may be present on the project site and determine whether the Proposed Action will have a potentially significant impact upon such species. Under FESA, habitat loss is considered an impact to the species (Michael Brandman Associates, 2008a). In addition, the agency is required to determine whether the project is likely to jeopardize the continued existence of any species that is proposed for listing under FESA or to result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC § 1536[3], [4]).

As stated earlier, the Proposed Action and the adjacent HCF are located within the boundaries of an area designated by USFWS as critical habitat for the desert tortoise. The Proposed Action is also within the boundaries of the Fremont-Kramer Desert Wildlife Management Area (DWMA) and Area of Critical Environmental Concern (ACEC) as designated by the West Mojave Plan (WMP, BLM, 2006). The proposed WMP designated four DWMA in the Mojave Desert that focus on the protection, conservation, and recovery of desert tortoise (*Gopherus agassizi*). The Fremont-Kramer DWMA also focuses on the protection and conservation of Mohave ground squirrel (*Spermophilus Mohavensis*) and certain other state or federal sensitive species that share habitats in this portion of the Mojave Desert.

The letter requesting Section 7 consultation with the USFWS is found in **Appendix A**. The BO covers the Proposed Action as described in this EA as well as the associated proposed HCF (**Appendix C**).

3.4.2.1 Migratory Bird Treaty Act (MBTA)

Many bird species, including migratory or limited distribution birds, are protected under federal and state regulations. Under the MBTA of 1918 (16 USC § 703-712), migratory bird species and their nests and eggs, which are on the federal list (50 CFR §10.13), are protected from injury or death; therefore, project-related disturbances must be reduced or eliminated during the nesting cycle. Species in the project vicinity that are covered by the MBTA include the three previously discussed State-sensitive species: California horned lark (*Eremophila alpestris actia*), northern harrier (*Circus cyaneus*) and sage sparrow (*Amphispiza belli*).

3.5 CULTURAL RESOURCES

The term “cultural resources” includes archeological, paleontological and historic resources. A detailed and confidential (to protect any identified resources) Cultural Resource investigation was conducted in May 2006. In addition, a federal cultural resources investigation of the roadway was conducted and

approved by BLM in September 2009. Any cultural resources are protected by the National Historic Preservation Act of 1966 and the Archeological Resources Protection Act of 1979. In the State of California, the location of any archeological resources as well as Native American burial sites, cemeteries and sacred places are protected from disclosure to the public and exempt from the Public Records Act. The Proposed Action is within the traditional boundaries of California Indians known as the Serrano.

No previously recorded cultural resources surveys or resources are known within the Project Area of Potential Effect. No prehistoric or historic-period resources were found within the area of potential effect (APE) of the Proposed Action during survey activities. The report generated as a result of that survey is available upon request from the Barstow BLM Field Office. Therefore, based on the results of this survey, cultural resources are not addressed further.

Based upon the potential of encountering cultural materials during construction, the County of San Bernardino imposed mitigation measures (refer to the MMP, included as **Appendix D**) including the presence of a qualified archeologist to monitor grading or excavation, and appropriate measures including cessation of grading and reporting should any unanticipated find be made. Any finds shall be fully analyzed and submitted to the County museum. No adverse impacts to cultural resources are likely to occur with imposition of this mitigation to prevent impacts to cultural resources that may be discovered during ground disturbing activities.

3.6 LAND USE PATTERNS

3.6.1 Transportation Networks

The HCF project site is located about a mile south of Highway 58 between Helendale Road to the east and the former access road of the former Hawes Airfield site to the west. The roadway that is the subject of this Proposed Action is currently in existence and is lightly used by the general public. Regional access is primarily provided by Highway 58 to the north, Interstate 15 to the east and Highway 395 to the west and from Highway 58 south on Helendale Road to the existing roadway. For more information regarding local transportation networks, please refer to the Traffic Impact Analysis in the DEIR (URS, 2006a).

3.6.2 Land Use

The existing route crosses undeveloped and undisturbed public land which has been designated as a DWMA by BLM, and continues through private lands to the west. No current mining exploration is occurring nearby, and the use of the route is generally for access through the area by casual recreationists or owners of the nearby private land parcels to the west that have not yet been developed.

The San Bernardino County General Plan (General Plan) guides all aspects of land use on private lands within the County. The current General Plan was adopted March 13, 2007 (County, 2007). The San Bernardino Development Code implements the regulations of land uses within the unincorporated areas of the County. Each property is assigned a “zone” or “land use district,” which describes the rules under

which land may be used. The private lands adjacent to the Proposed Action site are located in a Resource Conservation (RC) land use district.

3.7 PUBLIC HEALTH AND SAFETY

3.7.1 Traffic Management

SR 58 about one mile to the north of this route receives very heavy use and is a divided highway. Helendale Road is an improved and maintained two-lane shouldered road that is unpaved except near the intersection of SR 58, and generally receives light use. Traffic may be travelling at relatively high rates of speed on these two roads. The route proposed for upgrade currently receives light use at low to moderate speed.

3.7.2 Emergency Services

The San Bernardino County Fire District's North Desert Division serves a population of 150,000 within an area of 10,884 square miles. There are 24 fire stations in this division. The proposed HCF is within the service area of the North County Hinkley Station, located at 37284 Flower, Hinkley, CA. The Hinkley Station assists to the City of Barstow, responds to the I- 15 corridor north and south of Barstow, as well as the vast unincorporated areas west of the County line near Boron. The station is staffed on an on-call basis with paid-call firefighters who live in the local community. Apparatus consists of one Type 1 structure engine, one Type 4 brush patrol with four-wheel drive, one water tender to provide additional water for rural areas, and a squad containing specialized support equipment.

3.7.3 Solid and Hazardous Wastes

Currently no solid waste facilities are located in the vicinity of the access road and illegal dumping of waste is not a major issue in this area. A computerized search of state and federal agency databases performed a hazardous materials information query of all site within a nine-mile radius of the HCF site. The report concluded that there were no identified hazardous waste release sites within the Proposed Action site (CEQA EIR, 2006a). The project area does not contain surface or subsurface contamination from hazardous materials. The entire site is relatively undeveloped desert area.

SECTION 4.0

4 ENVIRONMENTAL IMPACTS

This section describes the environmental impacts that have potential to result from the Proposed Action and from the No Action Alternative, and mitigation to lessen or avoid those impacts. The direct and indirect environmental effects of the Proposed Action (**Section 4.1**) and the No Action Alternative (**Section 4.2**) are organized under the resource headings as described in **Section 3.0** and repeated below. **Sections 4.3** and **4.4** provide the analysis of cumulative effects of the Proposed Action. This section analyzes the impacts of the Proposed Action, when combined with other actions. The potential impacts of the adjacent Hawes Composting Facility (HCF) project are summarized in the corresponding sections below to the extent they may impact the proposed project, and further in the cumulative impacts section. For a full discussion regarding the impacts and conclusions of the DEIR and FEIR approved by the County, please refer to the CEQA documents located on the San Bernardino County website at: [San Bernardino County Nursery Products CEQA](#).

4.1 PROPOSED ACTION

The Proposed Action is the grant of a FLPMA right-of-way to upgrade, use, maintain, and restore, if appropriate, an existing route for commercial use, to provide access the County-approved HCF project on private land. The HCF site is currently accessible by a single existing, unnamed route either from the northwest or from the southeast. This existing route is unimproved and unmaintained; therefore, it does not currently provide adequate access to the commercial HCF based on the level and type of use anticipated. The portion of the existing route that connects to the HCF site from the southeast is the subject of this ROW application. It is located entirely on public lands and is currently designated as an open route available for use by the public (West Mojave Plan, 2006).

The CEQA analysis provided an analysis of the impacts of the connected action for the adjacent, approved HCF 80-acre composting facility to recycle biosolids and green material into agricultural-grade compost. The facility will receive up to 400,000 wet tons of biosolids and green material annually. These materials would arrive by truck along the proposed access road. Mitigation measures adopted as CEQA conditions of approval (COA) for the HCF or subsequent permits required by the County² in the COA are incorporated into the Proposed Action, to the extent that they may apply to the Proposed Action. Additional mitigation measures that are required or recommended by the USFWS through the biological opinion (BO, **Appendix C**) issued for this project are included as mitigation measures in this EA (**Section**

² Permits subsequently approved for the HCF with specific conditions affecting access include the Waste Discharge Requirements from the regional water quality control board and the Incidental Take Permit from California Department of Fish and Game.

5.0). The Proposed Action would upgrade and widen the existing roadway using materials and procedures employed by California Department of Transportation.

4.1.1 Water Resources

The analysis of water resources under CEQA found that the HCF could potentially result in impacts to local hydrology and water quality related to runoff from the HCF. This runoff may affect the Proposed Action, if not contained onsite. According to the Waste Discharge Requirements for the HCF, “the Discharger [Nursery Products, LLC.] has proposed to manage stormwater runoff by diverting all non-Facility stormwater around the Facility and preventing all on-site stormwater from leaving the Facility.” The WDR has approved this strategy and imposed several conditions for implementation, monitoring of effectiveness, and reporting of any breaches. The on-site management of stormwater therefore, will not directly impact the road. Indirect impacts are possible from the diversion of stormwater runoff around the facility if it adversely affects the integrity of the improved road covered under the ROW grant or the unimproved road on the west side of the facility. Desert tortoise culverts along the improved road may also serve to channel some of the offsite drainage east of the facility. Since the WDR was silent on this matter, additional mitigation is included that requires drainage facilities built for the facility be properly designed and maintained and not result in adverse impacts to the open route.

The Proposed Action will use water trucks to provide water for dust control by periodically watering the existing roadway prior to paving. The WDR from the regional water board provides that “water collected in the Surface Impoundments may be allowed to evaporate, or may be pumped out and reused within the composting process or for dust control at the Facility.” HCF is proposing to use recycled waste waters for dust suppression on the project site, and has not yet identified its source for any dust suppression water for the access route. This water is considered a Class II waste, and therefore is not suitable for use offsite. Since the WDR was not clear in this matter, additional mitigation is included that prohibits the use of facility recycled water on the roadway for dust suppression. The minimum amount of water needed for dust suppression will be used and will occur only during the brief period of time prior to paving the road. The Proposed Action specifically includes paving the road with a non-asphaltic material prior to the start of operations at the HCF as described in **Section 2.2**. Due to the limited scope and temporary nature of water usage needed for the Proposed Action, no adverse impacts to water resources will occur as a result of the ROW.

4.1.2 Air Quality

The emissions from truck transport to deliver biosolids and green material to the HCF site for composting and to deliver finished compost products to customers were calculated under the CEQA Traffic Study using emission factors calculated by the EMFAC2002 model for heavy duty trucks in San Bernardino County (DEIR Section 4.3 page 4-19; URS, 2006a). The average capacity and round-trip travel distance for trucks delivering feedstock materials to the HCF site and those hauling finished compost away from the site were estimated to be 23 tons and 200 miles. The length of the ROW is approximately 1.3 miles. Therefore, approximately 0.65 percent of emissions from an average round-trip delivery can be attributed

to the ROW directly. Based on this percentage and on the emissions calculated for the project as a whole in the DEIR (Table 4.3.9; URS, 2006a), the estimated tons of emissions per year that are directly attributable to the ROW are provided in **Table 4-1** on the following page.

As detailed in **Table 4-1**, the estimated operational emissions for each criteria pollutant directly attributable to the ROW would be less than one ton per year; the ozone related emissions for the first four pollutants in the table reflects a moderate increase in the local area, since currently there are no regular sources of ozone emissions in the area. However, the emissions from the traffic to the facility and from the windrows are well below the 100-ton de minimus limit identified by CARB. Additionally, the Proposed Action may have

TABLE 4-1
ESTIMATED ANNUAL EMISSIONS FROM TRUCK TRANSPORTATION DURING THE OPERATIONAL PERIOD

Criteria Pollutant	CO	VOC	NO _x	SO _x	PM ₁₀
Emissions (Tons Per Year)	0.024	0.16	0.54	0.01	0.01

SOURCE: URS, 2006a; AES, 2010

potential to generate criteria ozone-related air pollutants from the vehicles involved in the construction of the road, including diesel construction equipment and employee travel along the unpaved route; however, construction impacts would be extremely limited in area and of short duration.

As described in the DEIR, PM₁₀ emissions are proposed to be controlled by watering the route to the facility prior to pavement to minimize dust generation, consistent with the County Conditions of Approval for the facility CUP. The approved route must be watered to reduce dust; additionally, the Proposed Action includes non-asphaltic pavement of the road to further reduce dust prior to the start of operations at the HCF. Accordingly, the Proposed Action will result in minimal dust impacts, and the dust generated will occur primarily during high wind events. For a full discussion regarding potential impacts to air quality, please refer to Section 4.3 on page 4-3 of the DEIR.

Considering the relatively limited scope of the Proposed Action, the potential for generation of criteria air pollutants during the construction phase would be less than what can be expected from the operational phase of the ROW, and, therefore, construction phase emissions impacts would be considered federally de minimus. Given that the operational impacts of the ROW would be less than one ton per year, and when compared to the federal de minimus thresholds defined by the EPA (40 CFR 93 § 153) and identified in **Section 3.3**, the total anticipated emissions related to the ROW, including construction and operation, are considered federally de minimus (**Table 3-1; Section 3.3**).

Cumulative impacts would include emissions increases from operation of the adjacent facility. These emissions include generation of additional volatile organic compounds that may generate ozone. County conditions of approval require Best Available Control Technologies be implemented to control generation

of VOC on the adjacent facility. Therefore, ozone generation is not considered significant when added to the Proposed Action.

The presence of composting windrows may generate additional dust when it is turned, particularly during windy days. Watering procedures would minimize this dust generation and therefore are not anticipated to result in cumulative impacts, when combined with the Proposed Action, to PM₁₀.

Greenhouse Gas (GHG) Emissions

The primary potential source of GHG emissions associated with the Proposed Action is the use of the ROW by vehicles transporting materials to the HCF and the associated emissions. However, as described above, the Project is located nearer to the source of the biosolids materials than the existing recycling and composting facilities in Kern County or Arizona (**Section 3.3**). Since the distance traveled to deliver biosolids will decrease, overall GHG emissions will decrease for the region. The estimated annual emissions from truck transportation, which include GHG emissions, are given in **Table 4-1** and are considered federally de minimus (**Section 3.3**). The DEIR concludes that on-road trucking GHG emissions would not be created by the project. Further, the DEIR concludes that it is likely that overall regional on-road trucking emissions (including particulate matter, ozone, and other emissions) would be reduced due to shortened truck trips. Accordingly, the project will have a positive impact on GHG emissions by reducing the distance municipalities must travel for access to recycling and composting services.

As described above, potential environmental impacts resulting from the ROW are considered de minimis. No anticipated long term adverse impacts to air quality or GHG emissions will occur within the ROW from its upgrade and use. Cumulative impacts would be positive, since the Project will greatly reduce GHG emissions from a regional perspective (CEQA SEIR, Section 4.1).

4.1.3 Biological Resources

The proposed roadway identified for upgrade and access to the HCF site is located within boundaries of an area designated as desert tortoise critical habitat. Three special-status species were identified during the biological surveys for the project: one siting of the federal- and state-listed species, desert tortoise (Federal and State endangered), and three sitings of California Species Special of Concern (CSSC), a northern harrier (*Circus cyaneus*, CSSC) a sage sparrow (*Amphispiza belli*, CSSC), and a California horned lark (*Eremophila alpestris actia*, CSSC).

Desert tortoise sign was detected on the HCF site, including inactive burrows, carapace remains, and dried and fresh tortoise scat. Two live desert tortoises and their burrows were detected within 600 feet of the southeastern HCF boundary during the focused survey conducted in April 2006 (**Figure 4.4-2**). No sign of desert tortoise was found during surveys for the Proposed Action. The roadway upgrade runs east from the northeastern boundary of the HCF facility.

Mohave ground squirrel were not detected during the 2006 non-protocol spring surveys, although the more common white tailed antelope squirrel, an ecologically similar species, were commonly detected. Since the Mohave ground squirrel is a diurnal species and because an ecologically similar species was observed utilizing the site, and no Mohave ground squirrel were observed, it is probable that the Mohave ground squirrel is not present onsite. The closest documented location of Mohave ground squirrel is greater than 5 miles from the Project site. To confirm these findings, a protocol level survey for Mohave ground squirrel was conducted and is included as Attachment 2 to the Biological Assessment. A state endangered species, the Mojave ground squirrel is included in the CDFG ITP (see **Appendix F**), since generally multiple years of data are required to confirm absence.

Rare plants were not detected during three site visits conducted by botanists in spring 2006. No evidence of burrowing owl was detected during any of the biological surveys conducted on the site.

As stated in a January 22, 2010 letter from BLM to USFWS requesting Section 7 Consultation (**Appendix A**), BLM has determined that due to the location of the Proposed Action within Critical Habitat for desert tortoise, the Proposed Action may potentially affect the threatened desert tortoise. As concluded in the BO developed for the project, the existing dirt road was determined to be routinely used, heavily compacted, and not to provide suitable habitat for desert tortoise. However, the habitat adjacent to the existing road, which would be impacted by road improvements, is considered occupied suitable habitat for desert tortoise. The BO includes largely overlapping mitigation measures with those previously included in the CDFG ITP for the HCF and access road for desert tortoise. Further, the BO concludes that with implementation of the proposed avoidance and minimization measures of the BO and ITP, the use of the existing access road and the take resulting from the loss of habitat associated with the adjacent HCF will result in avoidance to the greatest extent feasible of direct, indirect, and cumulative impacts to the desert tortoise and the impacts to critical habitat will be fully offset. (**Appendices C and F**).

These desert tortoise protective measures include three below-grade tortoise crossings for the ROW in order to facilitate safe passage of desert tortoise underneath the road; desert tortoise exclusion fencing along the road to prevent special status species from crossing the road; and signage. Signage and the desert tortoise exclusion fencing also prohibit off-road vehicle access to adjacent federally-managed lands and post speed limits for the road. Signage and education are to be provided to drivers regarding the existence of endangered desert tortoise in the area, banning off-road vehicle use, discharge of fire arms, and road speed limits. Employees of the HCF are required to participate in endangered species training in order to encourage awareness of special status species (**Appendix C**).

The Mojave ground squirrel is listed by the State and not by the USFWS, thus the Biological Assessment transmitted to USFWS by BLM under Section 7 Consultation excludes the Mojave ground squirrel. Mohave ground squirrel was not detected during biological surveys; however, the species has been included in the DFG ITP. The additional survey and monitoring requirements will assure that the use of the existing access road and the development and operation of the adjacent HCF will minimize to the

greatest extent feasible of direct, indirect, and cumulative impacts to the Mojave ground squirrel if it is subsequently detected onsite. (**Appendix F**).

Federal protections are mandated for migratory birds through the Migratory Bird Treaty Act. As such, protection measures will apply to the three California Species of Special Concern, including California horned lark (*Eremophila alpestris actia*), northern harrier (*Circus cyaneus*) and sage sparrow (*Amphispiza belli*). These species of special concern while seen in the area have not been found to nest and are not likely to be adversely impacted by the granting of the ROW. Please see the MMP for measures in place to protect biological resources (CEQA EIR, Section 5.3; URS, 2006a).

Construction, operation, and maintenance activities for the road also have the potential to increase the distribution and abundance of non-native species within the action area due to ground-disturbing activities that favor the establishment of nonnative species. The increased abundance in non-native species associated with this project may result in adverse impacts from the additional disturbance and use of the road. These impacts include an increased fire risk and the future loss of higher quality habitat containing the features that provide food and shelter for desert tortoises and other species. Mitigation is required to minimize the potential spread of non-native species. This mitigation includes the requirement for survey of the access road and project site before operation of the facility to establish baseline conditions. This survey will document all plant species, and be followed by annual invasive and exotic plant surveys of the project site for at least five years. During the life of the project, a BLM approved herbicide would be used to remove any invasive or exotic plant species found along the road or on the adjacent project site to minimize the potential for spread of invasive species. Additionally, during operation of the facility, material transported to the facility would be covered to reduce the dispersal of non-native plant species into the project area. Measures to reduce dust (watering windrows and not turning windrows when wind speed exceeds 30 miles per hour) would also reduce the introduction and spread of invasive non-native species. With the implementation of this mitigation, BLM concludes that the introduction and spread of invasive non-native plants and the related increased risk of fire in the action area and on adjacent lands would be minimized to the extent feasible.

The Proposed Action specifically incorporates the terms set forth in the County-approved Mitigation and Monitoring Plan (MMP) and Conditional Use Permit (CUP) in the description of the use and improvement of the proposed road. As described in the BO (**Appendix C**) and listed in **Section 5.0**, further mitigation measures have been recommended by the USFWS or added by BLM and are incorporated as mitigation in this EA. Any further measures recommended in the USFWS BO or the DFG ITP will be included as mitigation in the FONSI. With the inclusion of mitigation measures within this EA and supplemented by those mandated in the CUP, MMP, the BO, and ITP, the Proposed Action will not result in adverse direct, indirect or cumulative impacts to biological resources, including special-status plant and wildlife species, or sensitive habitats.

4.1.4 Cultural Resources

As indicated in Chapter 3, no impacts to cultural resources are anticipated from the Proposed Action. However, any subsurface disturbance may impact cultural resources that cannot be detected through a County records search and Class III on-the-ground protocol survey. Therefore mitigation to be imposed includes the presence of a qualified archeologist to monitor grading or excavation, and appropriate measures including cessation of grading and reporting should any unanticipated find be made.

4.1.5 Land Use Patterns

4.1.5.1 Transportation Networks

The Proposed Action and adjacent HCF that it will serve are located in the Desert Region of the County of San Bernardino. Surrounding land uses include predominantly vacant desert with a single residence located approximately 1.5 miles east of the project site. A Traffic Impact Analysis (TIA) was conducted for the proposed Project in accordance with the guidelines set forth in the San Bernardino County Congestion Management Program (CMP) 2003 Update. According to the traffic impact analysis procedures, guidelines and threshold of significance specified by San Bernardino County CMP, the TIA conducted for the proposed Project indicates that the proposed Project will not create significant traffic impacts to the surrounding roadway circulation system (EIR: Appendix D; USR, 2006a).

The Proposed Action will not impede emergency access for fire or medical emergency vehicles, since the route will be upgraded to an improved, maintained roadway. The existing low baseline traffic along the access road and projected operational traffic volume will not hinder emergency response times. There will be only limited, short-term traffic impacts from the ROW during the period of improvement of the roadway. These impacts will not adversely affect the overall transportation network since the use of the route is light and intermittent, and would not impact access to other improvements on the land.

4.1.5.2 Land Use

Proposed protection measures for desert tortoise would not impair the goals set forth under both DWMA and FLPMA, as described in **Section 3.0** and the Biological Resources Section above, and would not affect the County's regional land use designation as Resource Conservation for surrounding private lands. Therefore, no adverse impacts to land use are anticipated.

4.1.6 PUBLIC HEALTH AND SAFETY

4.1.6.1 *Traffic Management*

Traffic may be travelling at relatively high rates of speed on Helendale Road. Improvement of the access road at Helendale Road is required by the CUP Conditions of Approval including the upgrade and realignment of this intersection. Therefore, adverse impacts to public safety from the increased turning truck traffic has been adequately minimized.

4.1.6.2 *Emergency Services*

The adjacent HCF is not anticipated to substantially increase demand for emergency services. On-site water requirements and set-backs for vegetation from structures is anticipated to minimize the demand for emergency services, and the upgrade of the road is anticipated to improve emergency access to the facility as well as to adjacent public lands for fighting of brush fires.

4.1.6.3 *Solid and Hazardous Wastes*

No impacts to hazardous wastes are anticipated from the construction and use of the access road with the imposition of standard mitigation measures. These measures require all solid waste to be removed on a regular basis, and all regulated and hazardous wastes to be cleaned up promptly, if they occur. In addition, the applicant must comply with a waste management plan, consistent with the BO and ITP. The measures in that plan minimize the potential for and assure management of any solid waste management on site or along the access road.

4.2 NO ACTION ALTERNATIVE

As described in **Section 2.0**, under the No-Action Alternative, the BLM would not approve the ROW application for the use and improvement of the existing roadway. The unimproved route would continue to be available to the general public. Alternative access to the site would need to be approved, most likely across private lands. However, no reasonable alternative access has been identified, and the impacts from any alternative access cannot be anticipated at this time. Impacts from any alternative access would most likely be similar to those of the Proposed Action. The no action alternative impacts analysis does not factor in an alternative access scenario.

4.2.1 Water Resources

The No Action Alternative would not result in changes to groundwater or surface water resources. Adverse impacts are not occurring at this time, and no adverse impacts to surface water or groundwater resources are anticipated under the no action alternative.

4.2.2 Air Quality

Under the No Action Alternative, the unpaved roadway would continue to be used by the public. Dust generation is intermittent and light, but does occur during windy days. Paving a portion of the route would not occur under the no action alternative, and neither would the increased truck traffic. The net effects

from these two changes to dust (and PM₁₀) generation are minimal, since construction and truck traffic would generate additional dust, but hardening of the route would minimize new dust generation during operations. The presence of composting windrows would generate additional dust during windy days, but this dust generation is not anticipated to be substantial with the imposition of County COA and required monitoring and reporting for the facility.

4.2.3 Biological Resources

Under the No Action Alternative, the roadway would continue to receive light use by the general public. Adverse impacts to special-status species and associated habitat are rare in most lightly used areas, have not been documented in this area, and are less likely to occur under this alternative than under the Proposed Action, which may draw more casual users into the area because of the improved access.

4.2.4 Cultural Resources

No significant cultural resources have been identified in the vicinity. No adverse impacts to cultural resources from the no action alternative are anticipated.

4.2.5 Land Use Patterns

4.2.5.1 Transportation Networks

Under the No Action Alternative, there would be no changes to the existing transportation roadway network. No adverse impacts would occur.

4.2.5.2 Land Use

Under the No Action Alternative, the land use jurisdiction of the roadway would remain unchanged. The goals set forth under both DWMA and FLPMA would continue to be pursued, and the no action alternative would not affect the County's regional land use designation as Resource Conservation for surrounding private lands. Therefore, no adverse impacts to land use are anticipated.

4.2.6 Public Health and Safety

4.2.6.1 Traffic Management

Traffic management for this area would not change. The access route and intersection with Helendale Road has not been documented as a problem areas for traffic management and does not have a high rate of accidents. Therefore, adverse impacts to public safety from the existing traffic with no upgrade are not anticipated.

4.2.6.2 Emergency Services

Demand for emergency services in this area would remain unchanged. No adverse impacts to public health and safety would occur. Emergency access to adjacent public lands for fighting of brush fires would not be improved, but this is not anticipated to adversely impact public health and safety, due to the lack of adjacent housing.

4.2.6.3 *Solid and Hazardous Wastes*

No impacts to solid or hazardous waste are anticipated from the no action alternative, since no increase or change in access or availability for use by the public would occur.

SECTION 5.0

5 MITIGATION MEASURES

The ROW application and the Proposed Action specifically incorporate environmental protections and mitigation measures which were imposed by and are enforceable by other relevant County, state and federal agencies (**Section 1.4**). Mitigation specifically referenced in this EA is summarized below. Additional mitigation, including measures in the County Conditions of Approval, Lahontan Regional Water Board Waste Discharge Requirements, ITP, and BO for the adjacent facility is adopted and with which the applicant must comply. All mitigation measures imposed through the EIR have been included as either as part of the project description for the ROW or are otherwise incorporated by reference in this EA, except as noted below

5.1.1 Water Resources

All mitigation measures required by the County through the COA and associated MMP for the HCF have been incorporated into the Proposed Action, as well as Lahontan Waste Discharge Requirements (WDR) and are adopted. Since the WDR was silent on this matter, the following additional mitigation also applies:

- W-1:** Drainage facilities built to redirect flow around the adjacent HCF facility must be properly designed and maintained, so as not to result in adverse impacts to the improved road or open route.

5.1.2 Air Quality

All mitigation measures required by the County through the COA and associated MMP for the HCF have been incorporated into the Proposed Action and are adopted. The following mitigation measures pertain to the access road and ROW regarding the protection of regional air quality and are summarized from the COA, as supplemented by BLM:

- A-1:** Ongoing during construction, the unpaved access route and all associated construction piles shall be sprayed with water frequently enough to minimize generation of visible dust.
- A-2:** No recycled facility water shall be used for watering operations on public land.
- A-3:** Prior to initiation of operations, this road shall be improved with a non-asphaltic pavement to minimize dust generation by truck traffic.
- A-4:** During construction and operation, heavy equipment powered by diesel fuel used at the site shall use lower emitting diesel fuels. All trucks that make deliveries to the site, that are under the control of the applicant, shall also use lower emitting diesel fuels. Idling diesel equipment during constructions shall be shut off after 5 minutes of idling.

5.1.3 Biological Resources

All mitigation measures required by the County through the COA and associated MMP for the HCF have been incorporated into the Proposed Action and are adopted, as supplemented by the CDFG ITP (Appendix F), the USFWS BO (Appendix C), including conditions not specifically related to the access

road. The following mitigation measures pertain to the access road and ROW regarding protection of biological resources and are summarized from the COA, as supplemented by BLM:

- B-1:** The applicant must comply with all terms and conditions of the USFWS biological opinion within the timeframes/phases specified.
- B-2:** The applicant must comply with all terms and conditions of the CDFG ITP, within the timeframes/phases specified, including the acquisition of all lands for compensation and preparation of a Desert Tortoise Translocation Plan if deemed appropriate by CDFG.
- B-3:** Prior to commencing any ground-disturbing activity, the Applicant shall mitigate and/or avoid impacts to federally- and state-protected species by obtaining required incidental take permits from the United States Fish and Wildlife Service and the California Department of Fish and Game, and by complying with the terms of those permits, including, without limitation and the installation of permanent tortoise fencing along roads as required.
- B-4:** All employees, subcontractors, construction personnel, and other individuals who work on-site shall participate in an awareness program addressing desert tortoise, burrowing owl, Mohave ground squirrel, and other federally- and state-protected species at the Hawes site prior to ground-disturbing activities. The program shall be administered by the Authorized Biologist. It may be given in the field, and shall include truck drivers, delivery personnel, and other HCF-related personnel occasionally entering the work site. Wallet-sized certification cards shall be provided to personnel who have attended the training, and personnel shall carry those cards when working on site.
- B-5:** A permanent tortoise-proof fence shall be installed around the perimeter of the Project impact area prior to ground-disturbing activities. Once the fence is installed, clearance surveys for desert tortoise shall be conducted by qualified biologists to locate and remove any tortoises and close their burrows within the Project impact area. An authorized biological monitor shall be present during construction to ensure that tortoises do not enter the construction area and to remove or rescue any individuals that may be injured. Mortality of any tortoise shall be reported to wildlife agency staff.
- B-6:** Between February 15 and November 15, the tortoise clearance survey shall occur within 48 hours prior to ground disturbance. Between November 15 and February 14, the survey may be performed several days or weeks prior to ground disturbance, unless ground disturbance will occur during a rain event. Ground disturbance shall not occur during a rain event, unless a clearance survey has occurred within the previous 48 hours.
- B-7:** Vegetation clearing activities shall occur when tortoises are least likely to be active, including, but not limited to, the period between November 16 and February 14.
- B-8:** Cross-country (off-road) vehicle use is prohibited and signs shall be posted.
- B-9:** Except on paved roads with posted speed limits, vehicle speeds shall not exceed 20 miles per hour through desert tortoise habitat. This speed limit shall be posted along all access routes associated with the HCF. Drivers shall take all feasible steps to avoid tortoises encountered on the roads, including, but not limited to stopping and waiting for tortoises to cross the road.
- B-10:** All trash and discarded food items generated by construction and operation activities shall be promptly contained and regularly removed from the HCF site to reduce the attractiveness of

the area to ravens and other potential desert tortoise predators. Prior to ground-disturbing activities, the Applicant shall submit, and the County and the California Department of Fish and Game shall approve, a raven management plan designed to minimize desert tortoise predation as part of the Incidental Take Permit or Permits required under **Mitigation Measure B-2**. Additionally, all artificial water sources must be covered or otherwise made inaccessible to wildlife.

- B-11:** All deliveries of green material to the HCF shall be made in covered or enclosed vehicles in order to avoid or mitigate the potential for environmental impacts related to invasive species and damage to habitat. The Applicant shall not accept deliveries of green material in uncovered vehicles, and shall post a sign at the entrance to the composting facility notifying drivers of that policy.
- B-12:** All deliveries of biosolids to the HCF shall be made in covered or enclosed vehicles in order to avoid or mitigate the potential for significant environmental impacts related to damage to habitat, airborne transmission of pathogens, and soil contamination. The Applicant shall not accept deliveries of biosolids in uncovered vehicles, and shall post a sign at the entrance to the composting facility notifying drivers of that policy.
- B-13:** Tortoise clearance surveys are to be conducted at 15-foot intervals over the proposed ROW development footprint and shall be implemented concurrently with the required HCF surveys as described in **Mitigation Measure B-5** listed above. It is required that two surveys be conducted at specified intervals prior to declaring the site clear of tortoises. All burrows that could provide shelter should be excavated during the first clearance survey.
- B-14:** A qualified biologist shall monitor the construction area for nesting ravens and work with construction personnel to eliminate the availability of any roost sites for the common raven.
- B-15:** A qualified biologist shall monitor the construction area for any human-provided subsidies of food or water and work with onsite personnel to eliminate and/or reduce these subsidies. Examples would include maintaining all waste receptacles with proper covers and monitoring the watering of the site to reduce dust so that puddles of water are not produced that remain for over two hours.
- B-16:** A raven management plan shall be developed for the project site and the road and will include the following measures: the disposal of all trash directly into covered receptacles; weekly removal of trash offsite; monitoring and prompt removal of all sources of standing water; and the removal or destruction of any identified perch or nesting locations (Appendix J).
- B-17:** Tortoise fencing will be installed on BLM-managed land along both sides of Helendale Road from the intersection of the existing unnamed roadway subject of the ROW application to Highway 58.
- B-18:** The nesting bird surveys required by Mitigation Measure B-11 of the COA MMP for the HCF site, shall be implemented concurrently for the area subject to the ROW.
- B-19:** In order to ensure no net loss of suitable desert tortoise habitat from the Proposed Action for the approximately 6.5 acres of the 1.3-mile length of the roadway subject of the ROW between the HCF site and Helendale Road, habitat will be set aside at a ratio of 3 to 1 acres,

preserved land to developed land. As the widening and improvement of the road proposed under the ROW will impact a total of approximately 6.5 acres, this will result in the preservation of an additional 19.5 acres of suitable desert tortoise habitat. The mitigation land will be acquired and managed in accordance with the CDFG ITP.

The Proposed Action includes the terms mandated by the MMP and the CUP, as discussed particularly in **Section 1.4** and **Section 4.1.4**, as well as the mitigation measures imposed by BLM and identified above. All terms mandated by the BO and CDFG ITP are also binding terms of the Proposed Action, and shall be incorporated into the right-of-way grant.

5.1.4 Cultural Resources

All mitigation measures required by the County through the COA and associated MMP for the HCF have been incorporated into the Proposed Action and are adopted, including conditions not specifically related to the access road. The following mitigation measures pertain to the access road and ROW regarding protection of biological resources and are summarized from the COA, as supplemented by BLM:

CR-1: Monitoring by a qualified archaeologist shall occur during grubbing, grading, or any construction excavation that disturbs native soils. In the event that an unanticipated find is discovered during construction activities, the construction crew will stop work in the immediate vicinity of the discovery. The Applicant will report the discovery to the San Bernardino County Museum and the Land Use Services Department. A qualified archaeologist will be required to assess the integrity and significance of any discovery prior to work proceeding in the area.

Should human remains be encountered, work in the vicinity must be terminated and the County Coroner will be notified immediately pursuant to Section 7050.5 of the Health and Safety Code, Section 7050.5 (c). If the coroner recognizes the remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she will contact the Native American Heritage Commission. The Land Use Services Department shall require the Applicant to take reasonable measures to avoid or minimize impacts to the resource if the resource is determined to be significant, i.e., eligible for the CRHR.

CR-2: Monitoring of excavation in areas identified as likely to contain paleontologic resources by a qualified paleontologic monitor is required for all excavation into undisturbed sediments of Pleistocene older alluvium, both at the surface and in the subsurface. Paleontologic monitors must be equipped to salvage fossils as they are unearthed, to avoid construction delays, and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. Monitors must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens.

CR-3: Any recovered specimens shall be prepared and stabilized to a point of identification and permanent preservation, including washing of sediments to recover small invertebrates.

- CR-4:** Any small specimens collected shall be identified and curated into an established, accredited museum repository with permanent retrievable paleontologic storage (e.g., SBCM). These procedures are also essential steps in effective paleontologic mitigation (Scott et al., 2004) and CEQA compliance (Scott and Springer, 2003). The paleontologist must have a written repository agreement in hand prior to the initiation of mitigation activities. Mitigation of adverse impacts to significant paleontologic resources is not complete until such curation into an established museum repository has been fully completed and documented.
- CR-5:** If any paleontological resources are found during excavation, a report of findings with an appended itemized inventory of specimens, shall be prepared and submitted to the County Museum and Land Use Services Department.

5.1.5 Other Mitigation

- GEN-1:** All vehicles and equipment shall be washed down at regular intervals to reduce spread of invasive species, and dust and spore levels.
- GEN-2:** Due to needed pre-work surveys, plans for relocation of any desert tortoise found, and compensation requirements that must be met, a notice to proceed will be required to initiate ground-disturbing activities.

SECTION 6.0

6 AGENCIES AND INDIVIDUALS CONSULTED

This section lists persons and agencies who were consulted or who provided input in the preparation of this Environmental Assessment (EA). Persons consulted for this EA that are associated with an agency or organization are listed underneath their agency or organization.

6.1 AGENCIES AND INDIVIDUALS CONSULTED

United States Department of Interior - Bureau of Land Management

Mickey Quillman, Chief, Resources Branch
Edythe Seehafer, Environmental Coordinator
Birgit Hoover, Realty Specialist
Chris Otahal, Wildlife Biologist
Jim Shearer, Archaeologist

United States Fish and Wildlife Service

Erin Nordin

California Department of Fish and Game

Curt Taucher, Regional Manager
Bruce Kinney, Deputy Regional Manager
Rebecca Jones, Environmental Scientist
Tonya Moore, Environmental Scientist

United States Air Force

City of Barstow, California

SECTION 7.0

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